



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,907	07/29/2003	John F. Schaupp	12545	8115

7590

01/31/2006

Lisa M. Soltis
Illinois Tool Works Inc.
3600 West Lake Avenue
Glenview, IL 60025

EXAMINER

GANEY, STEVEN J

ART UNIT

PAPER NUMBER

3752

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,907

Applicant(s)

SCHAUPP, JOHN F.

Examiner

Steven J. Ganey

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 and 13-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/3/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 19-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 19 there is an inconsistency between the language in the preamble, which recites “an apparatus for dispensing electrically charged particles of a coating material toward an object to be coated thereby”, and body of the claims which also positively recite “a first electrode provided on the dispenser and spaced a first distance from the object” and “multiple second electrodes arrayed around the dispenser at a second distance from the object”. This makes the scope of the claims unclear since they appear to be reciting the subcombination of the apparatus for dispensing, however, the limitations concerning the spaced distances toward the object are positively recited in direct relationship with the object. Applicant is required to clarify whether claims are drawn to the subcombination or the combination and to amend the claims to be consistent with the intent. As to treating the claims on the merits, the examiner is considering the claims to be drawn to the combination of the apparatus and the object.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 15, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-057848.

JP 10-057848 discloses an apparatus for dispensing electrically charged particles of a coating material comprising all the featured elements of the instant invention, note specifically first electrode 5 and second multiple needle-like electrodes at 6.

As to claims 1 and 19, and the recitation of “a first electrode spaced a first distance from the object” and the “multiple second electrodes around the dispenser at a second distance from the object, the second distance being greater than the first distance”, such limitations are met by JP 10-057848. Note the first electrode 5 of JP 10-057848, is at the front of the sprayer and the second electrodes 6 are located behind the first electrode, therefore, it is inherent that the first electrode will always be at a first distance from the object and the second electrodes will always be at a second distance from the object that is greater than the first distance.

The apparatus of JP 10-057848, is capable of performing the method steps as claimed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 15-20 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chabert in view of Buhlmann.

Chabert discloses an apparatus for dispensing electrically charged particles of a coating material comprising all the featured elements of the instant invention, note specifically first electrode 58 and second annular electrode at 45, except for multiple second electrodes arrayed around the dispenser. See Figure 1. As to the multiple second electrodes, note that the second electrode 45 of Chabert is arranged annularly around the axis of rotation of the dispenser. Buhlmann shows an electrostatic spraying device comprising a first electrode 12 and multiple needle-like second electrodes 64. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute multiple needle-like electrodes for the annular electrode of Chabert, since Buhlmann teaches that an annular electrode 44 and needle-like electrodes 64 are equivalents and that the annular electrode can be substituted with needle-like electrodes. Also, such a modification is merely the substitution of one electrode means for another and the apparatus of Chabert would perform equally as well with multiple needle-like electrodes or an annular electrode as disclosed as long as the electrode means is provided annularly around the axis of rotation of the dispenser, which Buhlmann shows.

As to claims 1 and 19, and the recitation of "a first electrode spaced a first distance from the object" and the "multiple second electrodes around the dispenser at a second distance from the object, the second distance being greater than the first distance", such limitations are met by Chabert and are also taught by Buhlmann. Note the first electrode of Chabert, as modified by

Buhlmann, is at the front of the sprayer and the second electrodes are located behind the first electrode, therefore, it is inherent that the first electrode will always be at a first distance from the object and the second electrodes will always be at a second distance from the object that is greater than the first distance.

The apparatus of Chabert, as modified by Buhlmann, is capable of performing the method steps as claimed.

7. Claims 2-4 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chabert in view Buhlmann as applied to claims 1, 19 and 20 above, and further in view of Applicant's Admission of Prior Art.

Chabert, as modified by Buhlmann, discloses all the featured elements of the instant invention except for the source of coating material being provided by a fluidized bed. Note in the specification on page 5, lines 32-33, where applicant discloses that the source may be of any known fluidized bed type and cites U.S. Patent 5,768,800. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a fluidized bed as the source of coating material since applicant discloses that such fluidized beds are well known to be used as sources of coating material and the apparatus of Chabert, as modified by Buhlmann, would be capable of being supplied by a fluidized bed.

As to claims 3, 4, 22 and 23, note in Chabert the cup-shaped component 56 and diffuser component 58 and col. 3, lines 30-34 concerning the first electrode provided on the diffuser component.

8. Claims 5-11, 13, 14 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chabert in view of Buhlmann and Applicant's Admission of Prior Art as applied to claims 1-4 and 19-23 above, and further in view of Schaupp et al.

Chabert, as modified by Buhlmann and Applicant's Admission of Prior Art, discloses all the featured elements of the instant invention except for a diffuser component having a first and second side with the first electrode on the second side facing away from the cup-shaped component and a multiple second electrodes comprising needle-like electrodes. Schaupp et al shows a rotary powder sprayer comprising a cup-shaped component 30 and a diffuser component 34 with an electrode 55 provided on a second side 57. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the diffuser component of Chabert with the diffuser component and electrode 55 of Schaupp et al, since such a modification would work equally as well in the apparatus of Chabert and is merely the substitution of one diffuser component/electrode for another.

As to claims 10 and 29, note paragraph 4 above.

Response to Arguments

9. Applicant's arguments with respect to claims 1-11 and 13-33 have been considered but are moot in view of the new grounds of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Ganey whose telephone number is (571) 272-4899. The examiner can normally be reached on Monday, Tuesday, Wednesday, and Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (571) 272-4919. The fax phone number for this Group is (571) 273-8300.

sjg

1/9/06



**STEVEN J. GANEY
PRIMARY EXAMINER**

1/9/06